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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Andrew Carver

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8429

27572

7590

12/08/2003

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EXAMINER

PHILOGENE, PEDRO

ART UNIT

PAPER NUMBER

3732

DATE MAILED: 12/08/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/882,320

Applicant(s)

CARVER ET AL.

Examiner

Pedro Philogene

Art Unit

3732

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 12 May 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-30 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_ 6) ☐ Other: \_\_\_\_\_

***Allowable Subject Matter***

Prosecution on the merits of this application is reopened on claims 1-30 considered unpatentable for the reasons indicated below:

***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 2,3,16,17,27 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The recitations of "combinations thereof" referring to combination of the proximal phalanges, intermediate phalanges and distal phalanges is confusing as it is not seen how there can be combinations of these phalanges. Each is a separate bone and does not exist in combination with the other bones. Also the end of the device is only disclosed and entering a single phalange at any time.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1,12,14,29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Evans et al. (4,516,569) in view of Schmitt et al. (3,739,773).

With respect to claims 1, 29, Evans et al disclose a device (20) for insertion into a first phalange and a second adjacent phalange, as set forth in column 1, lines 13,14 and column 3, lines 17-19, so as to fuse, as set forth in column 3, lines 7-11, the first phalange to the second phalange, comprising, a substantially elongated member (21); wherein the member (21) has a first end portion, the middle portion and a second end portion; as best seen in FIG.5, spaced and opposed from the first end portion, wherein the middle portion has a curvature such that a fixed angle, as best seen in FIG.5, is formed between the first end portion and the second portion. Curvature has been interpreted to mean that the first and second end portions are at an angle as shown in FIG.5 of Evans and FIG.4 of the instant application. This is consistent with applicant's lack of disclosure of any radius of curvature.

It is noted that Evans did not teach the use of a resorbable material, as claimed by applicant. However, in a similar art, Schmitt evidences the use of a resorbable material in devices which are to be inserted into bones so that no scar tissue remains and bone marrow is regenerated permitting the bone to accomplish its organic functions, as set forth in column 10, lines 53-64.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the device of Evans et al to be made of resorbable material as taught by Schmitt so that no scar tissue remains and bone marrow is regenerated permitting the bone to accomplish its organic functions.

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With respect to claims 12,14, the above combination of references teaches all the limitations; as set forth in the abstract of Schmitt et al and as best seen in FIG.5 of Evans et al.

Claims 2-11,13,15-28,30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Evans et al. (4,516,569) in view of Schmitt et al. (3,739,773) in view of Bramlet (5,984,970).

With respect to claims 2-11,13,15-25,30, it is noted that the above combination of references teaches all the limitations, except for a the first end portion and the second end portion having a surface portion for facilitating retention within the first phalange and the second phalange; as claimed by applicant. However, in a similar art, Bramlet evidences the use of a device having a first end portion and a second end portion having a surface portion for facilitating retention within the first phalange and the second phalange such that a substantive holding force will be developed when the end portion is threadably secured within the bone of the phalange.

Therefore, given the teaching of Bramlet, it would have been obvious to one having ordinary skill in the art at the time the invention was made to replace the fins of the device of Evans/Schmitt with the threads of the device of Bramlet to be implanted in the phalanges of a finger such that a substantive holding force will be developed when the end portions are threadably secured within the bone of the phalanges.

With respect to claims 26-28, the method steps, as set forth, would have been obviously carried out in the operation of the device, as set forth above.

### ***Conclusion***

A shortened statutory period for reply to this action is set to expire THREE MONTHS from the mailing date of this action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Pedro Philogene whose telephone number is (703) 308-2252. The examiner can normally be reached on Monday to Friday 6:30 AM to 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kevin P Shaver can be reached on (703) 308-2582. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9302.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0858.

Pedro Philogene  
December 03, 2003

  
PEDRO PHILOGENE  
PRIMARY EXAMINER